

The *riverine and tidal freshwater habitat* protects migratory and resident animals in low-salinity and variable salinity habitats. Located in the Taunton River from above the Taunton Wastewater Treatment Plant (TWWP) downstream to below the confluence with the Segreganset River near Peter Point, Berkley (river mile 11.4). This habitat comprises the entire water column and bottom sediments with salinities that range from 0 to approximately 15 ppt depending on the tide, precipitation, and other watershed factors. This habitat will benefit several species including sturgeon, river herring, shad, stickleback, perch, American Eel, Rainbow Smelt, sea-run Brook Trout, and Largemouth Bass.

The *shallow edge habitat* protects animals inhabiting intertidal areas, tidal channels, and estuarine areas to 1 meter deep in the Taunton River downstream of the confluence with the Segreganset River near Peter Point, Berkley (river mile 11.4) and in Mount Hope Bay in Massachusetts waters. This habitat comprises the water column and bottom sediments with light penetration to the bottom and salinities ranging from approximately 15 ppt to 32 ppt. This habitat will benefit several species including softshell clams, eastern oyster, horseshoe crab, stickleback, Mummichog, Atlantic Silverside, Northern Pipefish, Hogchoker, Windowpane, and Winter Flounder.

The *open-water pelagic habitat* focuses on the water column habitats in the tidal Taunton River downstream of the confluence with the Segreganset River near Peter Point, Berkley (river mile 11.4) and in Mount Hope Bay in Massachusetts waters. This habitat will protect diverse populations of seasonal sport fish, including Striped Bass and Bluefish; important bait fish such as Atlantic Menhaden, Atlantic Silversides, and Bay Anchovy; migratory fish including river herring, shad, and Rainbow Smelt; as well as longfin squid.

The *benthic habitat* protects animals inhabiting bottom substrates and near bottom waters deeper than 1 meter in the tidal Taunton River downstream of the confluence with the Segreganset River near Peter Point, Berkley (river mile 11.4) and Mount Hope Bay in Massachusetts waters. Low dissolved oxygen conditions can naturally occur in the deep sections of this habitat zone during July and August. This habitat will protect diverse populations of commercially and ecologically important shellfish such as whelks, quahog, eastern oyster, American lobster, and the horseshoe crab; ecologically important bottom sediment dwelling worms, small clams, and amphipods including the tube worm, Atlantic Nut Shell, and four-eye amphipod; and bottom-feeding fish like sturgeon, hakes, and flounders.

Commented [DR1]: Do we want to add a depth from the bottom to separate this habitat from the benthic habitat? For example to 1 m above the bottom sediment.

I have concerns about including the pycnocline until we have a better understanding of the depth it may occur at.

Commented [JB2R1]: The pelagic habitat includes surface waters and extends to the benthic/demersal zone, where the substrates and benthos affect habitat conditions

Commented [DR3]: We need to confirm that this is a possibility in order to distinguish between the low DO occasionally observed in these areas as natural or pollution driven.

